

WHAT IS CLAIMED IS:

1. A polypeptide encoded by a nucleic acid molecule at least 85% identical to a molecule selected from the group consisting of:

- (a) SEQ ID NO:1;
- (b) the fully complementary sequence of SEQ ID NO:1;
- (c) SEQ ID NO:2;
- (d) the fully complementary sequence of SEQ ID NO:2;
- (e) SEQ ID NO:3; and
- (f) the fully complementary sequence of SEQ ID NO:3.

2. The polypeptide of claim 1 that is encoded by SEQ ID NO:1.

3. The polypeptide of claim 1 that is encoded by the fully complementary sequence of SEQ ID NO:1.

4. The polypeptide of claim 1 that is encoded by SEQ ID NO:2.

5. The polypeptide of claim 1 that is encoded by the fully complementary sequence of SEQ ID NO:2.

6. The polypeptide of claim 1 that is encoded by SEQ ID NO:3.

7. The polypeptide of claim 1 that is encoded by the fully complementary sequence of SEQ ID NO:3.

8. A polypeptide encoded by a nucleic acid molecule selected from the group consisting of:

- (a) nucleotides 2-1999 of SEQ ID NO:1 (env);
- (b) nucleotides 2452-4839 of SEQ ID NO:1 (gag);
- (c) nucleotides 4871-8060 of SEQ ID NO:1 (pol);
- (d) nucleotides 598-2169 of SEQ ID NO:2 (gag);
- (e) nucleotides 2320-4737 of SEQ ID NO:2 (pol);
- (f) nucleotides 4738-6722 of SEQ ID NO:2 (env);

- (g) nucleotides 585-2156 of SEQ ID NO:3 (gag);
- (h) nucleotides 2307-5741 of SEQ ID NO:3 (pol); and
- (i) nucleotides 5620-7533 of SEQ ID NO:3 (env).

- 5 9. The polypeptide of claim 8 that is encoded by nucleotides 2-1999 of SEQ ID NO:1.
10. The polypeptide of claim 8 that is encoded by nucleotides 2452-4839 of SEQ ID NO:1.
11. The polypeptide of claim 8 that is encoded by nucleotides 4871-8060 of SEQ ID NO:1.
- 10 12. The polypeptide of claim 8 that is encoded by nucleotides 598-2169 of SEQ ID NO:2.
13. The polypeptide of claim 8 that is encoded by nucleotides 2320-4737 of SEQ ID NO:2.
- 15 14. The polypeptide of claim 8 that is encoded by nucleotides 4738-6722 of SEQ ID NO:2.
15. The polypeptide of claim 8 that is encoded by nucleotides 585-2156 of SEQ ID NO:3.
16. The polypeptide of claim 8 that is encoded by nucleotides 2307-5741 of SEQ ID NO:3.
- 20 17. The polypeptide of claim 8 that is encoded by nucleotides 5620-7533 of SEQ ID NO:3.
18. A polypeptide encoded by a sequence at least 15 base pairs in length selected from a polynucleotide sequence, the polynucleotide sequence selected from the group consisting
- 25 of:
- (a) SEQ ID NO:1;
 - (b) the fully complementary sequence of SEQ ID NO:1;
 - (c) SEQ ID NO:2;
 - (d) the fully complementary sequence of SEQ ID NO:2;
 - 30 (e) SEQ ID NO:3;
 - (f) the fully complementary sequence of SEQ ID NO:3; and
- further characterized by having less than 70% homology with the corresponding

region in human, mouse and primate retroviral sequences, wherein the last five 3' bases are unique to the selected sequence.

19. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from SEQ ID NO:1.

20. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from the fully complementary sequence of SEQ ID NO:1.

21. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from SEQ ID NO:2.

22. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from the fully complementary sequence of SEQ ID NO:2.

23. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from SEQ ID NO:3.

24. The polypeptide of claim 18, wherein the sequence of at least 15 base pairs is selected from the fully complementary sequence of SEQ ID NO:3.

25. A polypeptide encoded by a sequence selected from the group consisting of SEQ ID NO:4 through SEQ ID NO:74.

26. A polypeptide encoded by a sequence at least 20 nucleotides in length that hybridizes under stringent conditions to a molecule selected from the group consisting of

- (a) SEQ ID NO:1;
- (b) the fully complementary sequence of SEQ ID NO:1;
- (c) SEQ ID NO:2;
- (d) the fully complementary sequence of SEQ ID NO:2;
- (e) SEQ ID NO:3; and
- (f) the fully complementary sequence of SEQ ID NO:3.